

Level: master				
Course title: PREIMPLANTATION GENETIC DIAGNOSIS				
Status: elective				
ECTS: 4				
Requirements: -				
Learning objectives Learning objective is to introduce students to the principles of pre-implantation genetic diagnosis and procedures in pre-implantation genetic diagnosis of inherited disorders of various etiologies.				
Learning outcomes Upon successful completion of pre-examination and examination tasks a student can: - understand procedures used in pre-implantation genetic diagnosis process - explain genetic base of inherited disorders - define principles of chromosome aberration diagnostics, monogenic diseases, sexual diseases - understand basics of prenatal diagnosis - use Internet resources and scientific literature and conclude clearly				
Syllabus <i>Theoretical instruction</i> Historical development of pre-implantation genetic diagnosis (PGD). Procedures in pre-implantation genetic diagnosis. Genetic base of inherited disorders. Pre-implantation genetics. PGD chromosome aberrations. PGD monogenic diseases. PGD diseases caused by mitochondrial genome mutations. PGD in clinical cases of infertility. PGD sexual diseases and nonmedical sex selection. Prenatal diagnosis basics. <i>Practical instruction</i> Mastering basic laboratory techniques. Cariogram formation and diagnosis of chromosomal aberrations - virtual exercises. Introduction to Internet resources and use of data on genetic base of inherited disorders – OMIM. Introduction to Internet resources and use of information on procedures and tests in pre-implantation genetic diagnosis.				
Weekly teaching load				Other:-
Lectures: 2	Exercises: -	Other forms of teaching:2	Student research:-	